

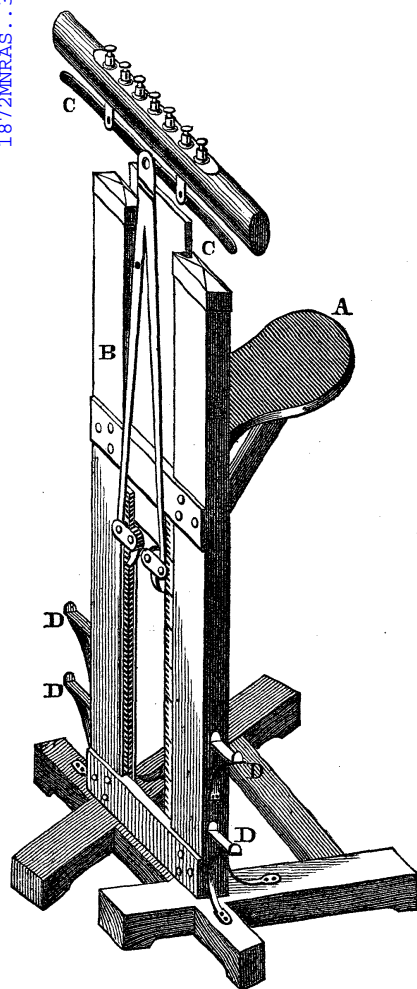
| No. | Stars' Names. | Mag. | Number of Obs. above and below Pole. | Total Number of Obs. | Mean R.A. Jan. 1, 1871. | | | Frac- tion of Year. 1871. | Mean N.P.D. Jan. 1, 1871. | | | No. in | | |
|-----|--------------------|------|---|-------------------------------|----------------------------|----|-------|------------------------------------|------------------------------|----|-------|-----------|--------|----------|
| | | | | | h | m | s | | ° | ' | " | Brisbane. | B.A.C. | Johnson, |
| 52 | Brisbane 5607 | 6.7 | 5 | 5 | 16 | 13 | 25.33 | .50 | 176 | 6 | 34.06 | 5607 | 5412 | 388 |
| 53 | * | 7 | 4 | 4 | 16 | 51 | 26.51 | .56 | 177 | 7 | 32.39 | | | |
| 54 | * | 7 | 3 | 3 | 16 | 51 | 29.35 | .56 | 177 | 15 | 12.51 | | | |
| 55 | Lacaille 7078 | 7 | 6 | 6 | 17 | 20 | 58.38 | .56 | 175 | 9 | 2.38 | | | |
| 56 | Brisbane 6058 | 6 | 8 | 8 | 17 | 38 | 51.49 | .49 | 177 | 39 | 15.44 | 6058 | 5936 | 433 |
| 57 | " 6229 | 7 | 5 | 5 | 17 | 58 | 56.40 | .55 | 176 | 16 | 6.77 | 6229 | | |
| 58 | Octantis Lac. 6295 | 6 | 7 | 7 | 18 | 8 | 11.93 | .50 | 179 | 16 | 42.00 | 5912 | 5959 | 423 |
| 59 | Lacaille 7442 | 7 | 2 | 2 | 18 | 13 | 59.24 | .56 | 175 | 40 | 37.16 | | | |
| 60 | " 7751 | 7 | 8 | 8 | 18 | 51 | 55.28 | .49 | 174 | 56 | 5.50 | | | |
| 61 | " 8257 | 7 | 2 | 2 | 20 | 11 | 24.13 | .51 | 174 | 50 | 12.41 | | | |
| 62 | * | 7 | 4 | 4 | 20 | 45 | 55.48 | .56 | 175 | 42 | 48.03 | | | |
| 63 | * | 6 | 3 | 3 | 20 | 48 | 54.78 | .48 | 176 | 9 | 38.31 | | | |
| 64 | Lacaille 8474 | 7 | 3 | 3 | 20 | 49 | 50.76 | .53 | 175 | 16 | 20.76 | | | |
| 65 | " 8511 | 7 | 3 | 3 | 20 | 54 | 2.37 | .51 | 174 | 50 | 2.33 | | | |
| 66 | B Octantis | 6.7 | 6 | 6 | 20 | 57 | 19.03 | .51 | 179 | 26 | 24.17 | 6644 | 7020 | 496 |
| 67 | Lacaille 8551 | 7 | 4 | 4 | 21 | 3 | 40.69 | .49 | 175 | 21 | 19.08 | | | |
| 68 | " 8626 | 7 | 4 | 4 | 21 | 20 | 42.74 | .50 | 176 | 25 | 9.16 | | | |
| 69 | " 8751 | 7 | 3 | 3 | 21 | 27 | 34.58 | .48 | 174 | 32 | 52.76 | | | |
| 70 | " 8720 | 6.7 | 6 | 6 | 21 | 27 | 46.32 | .51 | 175 | 37 | 29.53 | | | |
| 71 | " 8738 | 7 | 5 | 5 | 21 | 40 | 16.33 | .49 | 177 | 5 | 49.44 | | | |
| 72 | C Oct. Lac. 8924 | 6 | { S.P. 7 } 1 | 8 | 22 | 6 | 8.90 | .51 | 176 | 37 | 9.91 | 7119 | 7713 | 549 |
| 73 | Lacaille 9123 | 7 | { S.P. 3 } 1 | 4 | 22 | 29 | 13.97 | .47 | 174 | 24 | 50.16 | | | |
| 74 | Octantis | | { S.P. 6 } 3 | 9 | 23 | 7 | 26.93 | .46 | 178 | 11 | 20.58 | 7421 | | 578 |
| 75 | Lacaille 9401 | 7 | { S.P. 5 } 3 | 8 | 23 | 15 | 51.82 | .44 | 176 | 25 | 4.80 | | | |
| 76 | " 9464 | 7 | { S.P. 3 } 1 | 4 | 23 | 26 | 32.36 | .51 | 177 | 6 | 40.72 | | | |
| 77 | " 9563 | 7 | { S.P. 4 } 1 | 5 | 23 | 38 | 55.25 | .49 | 174 | 34 | 45.08 | | | |
| 78 | " 9596 | 7 | { S.P. 4 } 3 | 7 | 23 | 43 | 59.15 | .49 | 176 | 36 | 49.27 | | | |

1872, October 3.

*Note on an Observing Chair for use with Reflecting Telescopes
of the Newtonian Construction. By John Browning.*

The model of the observing chair, which I now exhibit, is made principally from suggestions I have received from Mr.

Knobel. I have, however, at his kindly expressed wish, introduced several modifications which he thinks will add to its usefulness, before bringing the contrivance forward for practical use.



The seat A, on which the observer sits astride, is rather more than counterbalanced by two weights attached to cords which hang from pulleys at the top of the uprights, and the weights run down the uprights B B, which are made hollow for the purpose; the chair is always locked automatically, but can be released by the observer clasp- ing either of the small metal handles C C underneath the main bar at the top which moves with the seat. On releasing the cams by means of either of these handles, and simply raising him- self from the seat, by resting his feet on the projecting brackets D, D, D, D, the seat will itself rise in position, while by allow- ing his weight to rest gently on the seat while either of the cam levers are held, he can lower the seat to the full extent of the actions.

On a Modified Form of Solar Eye-piece.

By John Browning.

Having been recently engaged in constructing several solar eye-pieces, the object in each case being to produce an eye-piece which would reflect to the eye of the observer fewer rays than those in general use, I came to the conclusion that the ordinary form of solar eye-piece, that is, with a single-surface reflexion from a prism or prisms, has not hitherto been made in the most efficient form.

It must upon the slightest consideration be at once evident that instead of presenting the surface of each prism to the light at an angle of 45° , so that the light should be reflected at an angle of 90° from the surface, that much more light would be transmitted, and much less reflected if the prism were presented to the light at an angle of nearly 90° , or as near as the difficulties of practical construction would admit of.